

C L A I M S

1. A spinneret assembly for melt spinning a plurality of strand-like filaments and comprising
5 an external housing,
a plurality of internal parts positioned in the housing and including at least one inlet component and a spinneret plate, with the inlet component including an inlet for admitting a melt into the interior of the
10 housing and the spinneret plate including a plurality of spin holes which serve as a melt outlet from the housing,

means joined to the housing for supporting the internal parts relative to each other in the housing,
15 and

at least one expansion body arranged in the housing between the housing and one of the internal parts, with the expansion body being formed of a material which has a higher thermal expansion
20 coefficient in comparison to that of the housing material, and with the expansion body being positioned such that upon being heated a pressure force is generated which provides a self sealing bracing of the internal parts.

25
2. The spinneret assembly of Claim 1 wherein the supporting means supports the internal components in a clamping direction, and wherein the expansion body is positioned such that upon being heated it applies a
30 force to the internal parts in an expansion direction that is aligned with the clamping direction.

3. The spinneret assembly of Claim 2 wherein the expansion body is configured such that upon being

heated, it expands primarily in the expansion direction.

4. The spinneret assembly of Claim 2 wherein the
5 expansion body is in the form of a ring which is
positioned between the inlet component and the housing.

5. The spinneret assembly of Claim 2 wherein the
expansion body is formed by a plurality of separate
10 expansion pieces which are positioned between the inlet
component and the housing.

6. The spinneret assembly of Claim 2 further
comprising at least one pressure plate positioned in
15 the housing between the expansion body and the housing
or between the expansion body and the inlet component.

7. The spinneret assembly of Claim 2 further
comprising a spring member positioned in the housing
20 between the housing and the spinneret plate or between
the housing and the inlet component such that a spring
force is operative in the clamping direction and a gap
is formed between the housing and the spinneret plate
or the inlet component.

25 8. The spinneret of Claim 1 wherein the expansion
body is permanently joined to the housing or to one of
the internal parts.

30 9. The spinneret of Claim 1 wherein the housing
is formed of a material which has a lower thermal
expansion coefficient in comparison to the materials of
the inlet component and the spinneret plate.

10. The spinneret assembly of Claim 1 further comprising a filter insert and an apertured plate positioned in the housing between the inlet component and the spinneret plate and so as to be held in place
5 by the supporting means.

10

11. The spinneret assembly of Claim 1 wherein the expansion body is formed of a material whose melting temperature is above about 500 degrees C.

12. The spinneret assembly of Claim 1 wherein the expansion body is positioned in the housing so as to be exchangeable.

15

13. The spinneret assembly of Claim 1 wherein the housing is of generally cylindrical configuration so as to define a central axis which is generally parallel to direction of the melt flow through the housing, with the housing including an integral flange at one end and an external thread at the other end, wherein the supporting means comprises a screw cap which is threadedly joined to the external thread at said other end of the housing and which includes a radial collar, and wherein the internal parts are supported between the integral flange of the housing and the radial collar of the screw cap.

30

14. The spinneret assembly of Claim 1 wherein the housing is of generally rectangular configuration and includes opposite ends which are spaced apart in the direction of the melt flow through the housing, said housing including a cover overlying one end thereof and a radial collar at the opposite end, wherein the internal parts are supported between the cover and the

radial collar, and wherein the supporting means comprises a plurality of screw caps which are disposed in threaded openings which extend through the cover.

5 15. The spinneret assembly of Claim 1 wherein the housing is of generally tubular configuration so as to define a central axis which is generally perpendicular to the direction of the melt flow through the housing, with the housing defining an axially extending internal
10 collar which supports said spinneret plate thereupon, and wherein the supporting means comprises a plurality of screw caps which are disposed in threaded openings which extend through the cover and perpendicularly with respect to said central axis and said spinneret plate.

15